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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/448,301	11/24/1999	HIROSHI YAMAGUCHI	1110-0258P	4884

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EXAMINER	
DO, ANH HONG	
ART UNIT	**PAPER NUMBER**
2624	

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/448,301	YAMAGUCHI, HIROSHI	
	Examiner	Art Unit	
	ANH H DO	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *9/14/2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) *3* is/are withdrawn from consideration.

5)☒ Claim(s) *2,14,15 and 16* is/are allowed.

6)☒ Claim(s) *1,4,5,7-13,17 and 18* is/are rejected.

7)☒ Claim(s) *6 and 19-26* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 9/14/2004 have been fully considered but they are not persuasive.

* In response to the applicant's argument on the improper rejections of claims 11, 17, and 18, the correction has been made in this office action.

* With respect to claims 1 and 12, the applicant contends that the cited prior art does not teach "normalization for correcting fluctuation of the image data in reading prior to compression of the image data to perform setup of said image data to achieve a predetermined reference value of the compressed image data" and "compression is performed prior to normalization of any the image data in Sugiyama, i.e., not normalization prior to compression". However, it should be noted in Fig. 1, Sugiyama clearly shows at the normalizing part 2, the normalization table is retrieved according to the combination of high-order 5 bit data, a correcting table is retrieved by low-order 3 bits and a value obtd (see Constitution) to perform normalization for correcting the fluctuation of the image data prior to compression by encoder part 3. Moreover, the attached partial English translation does not have the description of Figure 1, therefore it is impossible to conclude whether the Examiner has misinterpreted the Sugiyama's reference or not.

For the foregoing reasons, it is believed the rejection should be sustained.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 4, 5, 7-10, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi (U.S. Patent No. 5,940,824) in view of Sugiyama (Japan Patent No. JP404291881A).

Regarding claim 1, Takahashi discloses:

- a storage device for storing compressed image data, said storage device including the image database (Fig. 1: main image file D4);

- a retrieval device for retrieving said image while said compressed image data is in a compressed state (Fig. 1: search unit 12);

- a compression device for compressing image data to produce said compressed image data (Fig. 1: compression processing unit 15).

Takahashi does not specifically teach normalization of the image data prior to compression of said image data. One skilled in the art would have clearly recognized that the Takahashi system is to improve the total retrieval accuracy (col. 13, lines 55-60).

Sugiyama, in the same field of endeavor, teaches:

- normalizing for correcting fluctuation of said image data in reading prior to compression of said image data of said image to perform setup of said image data to achieve a predetermined reference value of the compressed image data, in which the

high accuracy is obtained (see Abstract: purpose and Constitution; and Fig. 1: normalizing part 2).

Therefore, it would have been obvious to perform normalization in Takahashi as taught by Sugiyama in order to improve the total retrieval accuracy.

Regarding claim 4, Takahashi teaches:

- wherein said storage device stores said compressed image data and information of the image under a correspondence therebetween (Fig. 1: main image file D4 storing compressed image data outputted from compression processing unit 15 and information outputted from keyword application unit 18 under a correspondence therebetween).

Regarding claim 5, Takahashi teaches:

- wherein said information of a correspondence image is read from said data base in accordance with a result retrieved by said retrieval device (Fig. 1: information of a correspondence image is read from said data base D4 in accordance with a result retrieved by said retrieval device 12).

Regarding claim 7, Takahashi teaches:

- compressed image data comprises spatial coefficients of a luminance signal and a color difference signal (col. 8, lines 31-35).

Regarding claim 8, Takahashi teaches:

- comparing the spatial coefficients of the luminance signal up to a specified order with each other to select objects to be retrieved (col. 7, lines 43-49), and thereby comparing the spatial coefficients of the color difference signal of the thus selected objects to be retrieved to another specified order with each other, and retrieval by comparing the spatial coefficients of the luminance signal up to a higher order than the previously specified order with each other (col. 11, lines 28-42).

Regarding claim 9, Takahashi teaches wherein said retrieval device performs priority ranking of said compressed image data to be candidate (col. 11, lines 11-20).

Regarding claim 10, Takahashi teaches:

- after said compressed image data is extended, one or more images are represented as visible images in accordance with the result of said priority ranking (Fig. 5 shows the visible images and Fig. 6 shows retrieval result after expanding the compressed image).

Regarding claim 12, Takahashi discloses:

- an image processing device for subjecting image or image data thereof to image processing (Fig. 1: scanner 21 and image input);

- a setting device for setting said image processing which said image processing device performs in accordance with image or image data thereof (Fig. 1: keyword application unit 18 or compression processing unit 15);

- a storage device for storing compressed image data (Fig. 1: main image file D4);

- a retrieval device for retrieving said image while said compressed image data is in a compressed state (Fig. 1: search unit 12);

- a compression device for compressing image data to produce said compressed image data (Fig. 1: compression processing unit 15).

Takahashi does not specifically teach normalization of the image data prior to compression of said image data. One skilled in the art would have clearly recognized that the Takahashi system is to improve the total retrieval accuracy (col. 13, lines 55-60).

Sugiyama, in the same field of endeavor, teaches:

- normalizing for correcting fluctuation of said image data in reading prior to compression of said image data of said image to perform setup of said image data to achieve a predetermined reference value of the compressed image data, in which the high accuracy is obtained (see Abstract: purpose and Constitution; and Fig. 1: normalizing part 2).

Therefore, it would have been obvious to perform normalization in Takahashi as taught by Sugiyama in order to improve the total retrieval accuracy.

Regarding claim 13, Takahashi teaches:

- when said information of the image processing corresponding to said image retrieved by said retrieval device is read out in accordance with an instruction for reprocessing said image or image data thereof, said setting device reproduces said image processing to which said image or said image data thereof has previously been subjected using the thus read information of said image processing (col. 5, lines 7-22).

4. Claims 11, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi (U.S. Patent No. 5,940,824) in view of Sugiyama (Japan Patent No. JP404291881A) and Otto (U.S. patent No. 6,244,514).

Regarding claim 11, although Takahashi and Sugiyama teach the claimed subject matters as discussed in claims 1, 4, and 12 above, they do not teach the information is at least one of image data of the image of interest and information of image processing to which the image of interest is subjected.

One skilled in the art would have clearly recognized that in the Takahashi system, the data volume could be reduced in data retrieval (col. 14, lines 4-8).

Otto, in the same field of endeavor, teaches:

- said information is at least one of image data of the image of interest and information of image processing to which the image of interest is subjected (col. 7, lines 47-53).

Therefore, it would have been obvious to define the information is at least one of image data of the image of interest and information of image processing to which the image of interest is subjected image data in Takahashi and Sugiyama as taught by Otto in order to reduce the data volume in the data retrieval.

Regarding claims 17 and 18, Otto teaches wherein said normalization is performed so that the averages of the compressed image data become equal to each other (col. 9, lines 10-18, teaches the mean is equal to the pixel values of the image data). The motivation is set forth in claim 11 above.

Allowable Subject Matter

5. Claims 2, 14, 15, and 16 are allowed.

6. Claims 6 and 19-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter:

Regarding independent claims 15 and 16 and dependent claim 6, the prior art, either taken singly or in combination, does not teach:

- wherein said retrieval device performs retrieval of said image using said compressed image data after said compressed image data of said split images in regions which are in point symmetry relation with each other about the center of said image are added.

Regarding claims 2 and 14, since these claims depend upon claims 15 and 16 respectively, they are also allowable for the same reason.

Regarding claims 19 and 23, the prior art, either taken singly or in combination, does not teach:

- wherein said fluctuation of said image data is due to at least one of... a digital camera.

Regarding claims 20-22, 26 and 24, 25, since these claims depend upon claims 19 and 23 respectively, they are also allowable for the same reason.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANH H DO whose telephone number is 703-308-6720. The examiner can normally be reached on 5/4-9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DAVID K MOORE can be reached on 703-308-7452. The fax phone

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

February 22, 2005.

ANH HONG DO
PRIMARY EXAMINER